

### **REMARKS**

Applicants have carefully reviewed the Office Action mailed December 10, 2008, and thanks Examiner Loudon for the detailed review of the pending claims. In response to the Office Action, Applicants have amended claims 1 and 32, cancelled claim 33, and added new claim 34-35. Claims 2-13 were previously cancelled. By way of this amendment, no new matter has been added. Accordingly, claims 1, 14-32 and 34-35 remain pending in this application. At least for the reasons set forth below, Applicants respectfully traverse the foregoing rejections.

As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such assertions/requirements in the future. Further, for any instances in which the Examiner took Official Notice in the Office Action, Applicants expressly do not acquiesce to the taking of Official Notice, and respectfully request that the Examiner provide an affidavit to support the Official Notice taken in the next Office Action, as required by 37 CFR 1.104(d)(2) and MPEP § 2144.03. Applicants respectfully request reconsideration of the present application in view of the above amendment, and the following remarks.

### **Drawing Objections**

The Examiner objected to the drawings for failing to comply with 37 CFR 1.84(p)(4) because reference characters "ES1 & ES2" and "PS1 & PS2" have both been used to designate the straight lines of claims 15, L3 & 33, L4. Claim 33 has been cancelled, and the remaining claims do not reference "PS1 and PS2." Therefore, this rejection is moot. Accordingly, withdrawal of the objection is therefore respectfully requested.

### **Amendment to the Specification**

Paragraph [0023a] was inserted in the specification before paragraph [0023]. Paragraph [0023a] is an English translation of a paragraph on page 5 of the German language application PCT/EP2004/006090. The present application is a national stage entry of PCT/EP2004/006090 and the contents of paragraph [0023a] were inadvertently omitted. Entry of the amendment is therefore respectfully requested.

### **Objections to Title in Specification**

The Examiner objected to the title because the title page 1 of the specification does not match the title of the declaration for utility or design patent application. Applicant has amended the title of the specification accordingly to match the declaration for utility. Accordingly, withdrawal of the objection is therefore respectfully requested.

### **Claim Rejections Under 35 U.S.C. §102**

Claims 1, 14-15, 19-21 & 29 were rejected under 35 U.S.C. 102(b) as being anticipated by Ouchi et al., (U.S. Patent Publication No. 2001/0021671). Applicants respectfully traverse the rejection.

#### **1. The Law**

To anticipate a claim, the reference must teach every element of the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

## 2. Independent Claim 1

Independent claim 1 recites that “wherein each two adjoining pairs of tracks comprise outer ball tracks whose center lines are positioned in planes (E1, E2) which extend substantially parallel relative to one another, and inner ball tracks whose center lines are positioned in planes (E1', E2') which extend substantially parallel relative to one another” and where “track cross-sections of the outer ball tracks and the inner ball tracks of each pair of tracks are symmetrical relative to axes of symmetry (ES<sub>1</sub>, ES<sub>2</sub>) which, together with the outer and inner ball track planes (E1, E2, E1', E2'), form identically sized angles (f<sub>1</sub>, f<sub>2</sub>) opening in opposite directions, and each comprise a common point (M, M').” Claim 1 has been further amended to recite “wherein the track cross-sections of the outer ball tracks and the inner ball tracks are formed so as to generate contact with the balls in two points,” (emphasis added). Support for this amendment may be found in at least dependent claim 33, and page 12 of the English translation, lines 10-13.

- i. **Ouchi does not teach “wherein each two adjoining pairs of tracks comprise outer ball tracks whose center lines are positioned in planes (E1, E2) which extend substantially parallel relative to one another, and inner ball tracks whose center lines are positioned in planes (E1', E2') which extend substantially parallel relative to one another.”**

The Examiner asserts that Ouchi teaches that the ball track center lines extend substantially parallel to each other (*Office Action, page 3*). However, Applicant specifically draws attention to FIG. 13 of Ouchi (reproduced below for the Examiner's convenience) and paragraph [0175] to demonstrate Ouchi actually teaches that the inner race 302A includes inner engagement grooves 307, where the grooves are formed in a right angle with respect to the circumferential direction. In other words, as seen by FIG. 13, Ouchi actually teaches that the inner engagement grooves 307 of the inner race 302A extend radially outwardly from the center of the inner race 302A (refer to the annotations in FIG. 13 below).

In contrast, claim 1 positively recites adjoining pairs of tracks with outer ball tracks, whose “center lines are positioned in planes (E1, E2) which extend substantially parallel relative to one

another,” as well as “inner ball tracks whose center lines are positioned in planes (E1', E2') which extend substantially parallel relative to one another.” Accordingly, for at least this reason Ouchi does not teach every recitation of independent claim 1, as required by *Verdegaal Bros.*

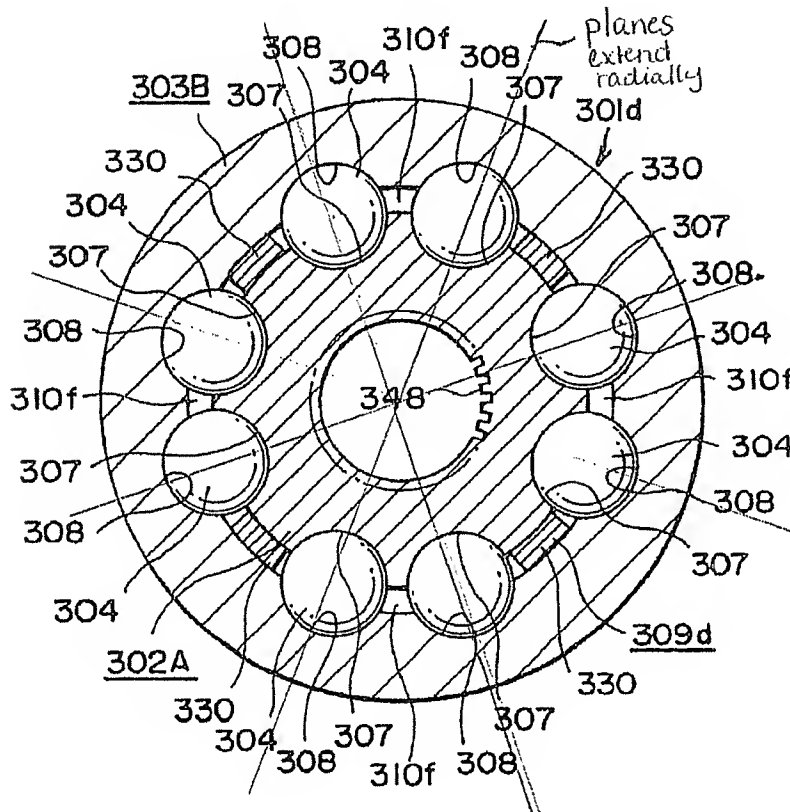


FIG. 13 of Ouchi

- ii. Ouchi does not teach or suggest “wherein track cross-sections of the outer ball tracks and the inner ball tracks of each pair of tracks are symmetrical relative to axes of symmetry (ES<sub>1</sub>, ES<sub>2</sub>) which, together with the outer and inner ball track planes (E1, E2, E1', E2'), form identically sized angles (Φ<sub>1</sub>, Φ<sub>2</sub>) opening in opposite directions, and each comprise a common point (M, M').”

The Examiner asserts that Ouchi teaches the track sections of the outer ball tracks and the inner ball tracks are symmetrical relative to the axis of symmetry, which together with the outer and inner ball track planes, form identically sized angles opening in opposite directions, where each comprise a common point (*Office Action, page 5*). However, as discussed above, Ouchi actually teaches that the inner engagement grooves 307 extend radially outwardly from the center of the inner race 302A (refer to the annotations in FIG. 13 above). Therefore, the inner engagement

grooves 307 of the inner race 302A also include “axes of symmetry” that are the same as the “center lines” of the inner engagement grooves 307. Because the inner engagement grooves 307 include the same line for the “axes of symmetry” as well as the “center lines,” then inner race 302A can not possibly “together with the outer and inner ball track planes (E1, E2, E1', E2'), form identically sized angles ( $f_1$ ,  $f_2$ ) opening in opposite directions, and each comprise a common point (M, M').” Accordingly, for at least this reason Ouchi does not teach every recitation of independent claim 1, as required by *Verdegaal Bros.*

iii. **Ouchi does not teach or suggest “wherein the track cross-sections of the outer ball tracks and the inner ball tracks are formed so as to generate contact with the balls in two points.”**

Ouchi teaches that the inner race 302A includes ten streaks of engagement grooves 307, which are in the direction right-angled to the circumferential direction (paragraph [0175]). The outer race 303B also includes engagement grooves 308 as well, which are also formed right-angled to the circumferential direction (paragraph [0175]). Ouchi also teaches that the engagement grooves are formed by “each taking a circular arc configuration,” (paragraph [0175]). Indeed, referring to FIG. 13 (reproduced above for the Examiner’s convenience), the engagement grooves 307 and 308 are all illustrated as a continuous, circular arc. Therefore, the engagement grooves 307 and 308 of the inner and outer race can not possibly be formed “formed so as to generate contact with the balls in two points.” Accordingly, for at least this reason Ouchi does not teach every recitation of independent claim 1, as required by *Verdegaal Bros.*

Dependent claims 14-15, 19-21 and 29 depend from independent claim 1 and include additional recitations that are separately patentable. Merely by way of example, claim 14 recites “wherein the track cross-sections of the outer ball tracks and of the inner ball tracks of each pair of tracks are each symmetrical relative to radial rays (RS1, RS2) from the longitudinal axes (L12, L13) through the ball centers (K1, K2) of the torque transmitting balls of the pair of tracks.” Ouchi does not teach or suggest these recitations. Accordingly, withdrawal of the rejection is respectfully requested.

**Claim Rejections Under 35 U.S.C. §103**

Claims 16-18 22-28 & 32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ouchi et al. (US 2001/0021671).

**1. The Law**

The Examiner has the initial burden of demonstrating that all the claimed features of the invention are taught by the prior art. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Where the Examiner relies on a single reference under Section 103, it is insufficient to merely state that it would be obvious, or a mere matter of design choice, to modify the disclosure to include the features of the claimed invention. *In re Mills*, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990). All of the claim limitations must be taught or suggested by the prior art in order to establish *prima facie* obviousness of a claimed invention. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). See MPEP § 2143.03; *accord*, M.P.E.P. § 706.02(j).

“To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effects of a hindsight syndrome.” *In re Fine*, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (quoting *W.L. Gore & Assoc. v. Garlock, Inc.*, 220 USPQ 303, 312-13 (Fed. Cir. 1983)).

"To establish *prima facie* obviousness of a claimed invention, all the claim recitations must be taught or suggested by the prior art." *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). M.P.E.P. § 2143.03. *Accord*. M.P.E.P. § 706.02(j).

**2. Claims 16-18 22-28 & 32**

The Examiner admitted that Ouchi does not disclose any of the recitations found in claims 16-18, 22-28 and 32, but simply claimed (without citation to any prior art references to support the assertions) that it would have been obvious to one of skill in the art to make these modifications (*Office Action, page 7-10*). However, Claims 16-18 22-28 and 32 depend on claim 1. The remarks presented above with respect to the claim 1 rejections are equally applicable here. Specifically, the

inadequacy of Ouchi to teach every element of independent claim 1 by not teaching “wherein each two adjoining pairs of tracks comprise outer ball tracks whose center lines are positioned in planes (E1, E2) which extend substantially parallel relative to one another, and inner ball tracks whose center lines are positioned in planes (E1', E2') which extend substantially parallel relative to one another” and where “track cross-sections of the outer ball tracks and the inner ball tracks of each pair of tracks are symmetrical relative to axes of symmetry (ES<sub>1</sub>, ES<sub>2</sub>) which, together with the outer and inner ball track planes (E1, E2, E1', E2'), form identically sized angles (f<sub>1</sub>, f<sub>2</sub>) opening in opposite directions, and each comprise a common point (M, M'),” and “wherein the track cross-sections of the outer ball tracks and the inner ball tracks are formed so as to generate contact with the balls in two points,” is also fatal to the Examiner’s rejection in light of knowledge of one of ordinary skill in the art. Indeed, the unsupported assertions of “knowledge of one of ordinary skill in the art” does not make up for the inadequacy described above with the combination of Ouchi. Therefore, the combination of Ouchi and knowledge of one of ordinary skill in the art do not teach every recitation of claim 1, as required in *In re Royka*.

### **3. Claims 30-31**

Claims 30-31 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ouchi et al, (U.S. 2001/0021671) further in view of Jacob, (U.S. Patent No. 6,270,419).

The Examiner admitted that Ouchi does not disclose any of the recitations found in claims 16-18, 22-28 and 32, but that it would have been obvious to one of skill in the art to make these modifications (*Office Action, page 10*). Claims 30-31 depend on claim 1. The remarks presented above with respect to the claim 1 rejections are equally applicable here. Specifically, the inadequacy of Ouchi to teach every element of independent claim 1 by not teaching “wherein each two adjoining pairs of tracks comprise outer ball tracks whose center lines are positioned in planes (E1, E2) which extend substantially parallel relative to one another, and inner ball tracks whose center lines are positioned in planes (E1', E2') which extend substantially parallel relative to one another” and where “track cross-sections of the outer ball tracks and the inner ball tracks of each pair of tracks are symmetrical relative to axes of symmetry (ES<sub>1</sub>, ES<sub>2</sub>) which, together with the

outer and inner ball track planes (E1, E2, E1', E2'), form identically sized angles ( $f_1, f_2$ ) opening in opposite directions, and each comprise a common point (M, M')," and "wherein the track cross-sections of the outer ball tracks and the inner ball tracks are formed so as to generate contact with the balls in two points," is also fatal to the Examiner's rejection in light of knowledge of one of ordinary skill in the art. Nor does Jacob make up for the inadequacy described above with the combination of Ouchi. Therefore, the combination of Ouchi and Jacob do not teach every recitation of claim 1, as required in *In re Royka*.

#### 4. Claim 33

Claim 33 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ouchi et al, (U.S. 2001/0021671), in view of Jacob, (U.S. Patent No. 6,270,419), as applied to claims 1-32 above, and further in view of Krude (U.S. Patent No. 4, 019,347). Applicants traverse the rejection.

Claim 33 has been cancelled, and therefore this rejection is moot. However, Applicant directs the Examiner's attention to new claims 34-35. Claim 35 includes similar recitation as previously presented claim 33. Claim 35 is dependent on claim 34. Claim 34 recites, in part "wherein each two adjoining pairs of tracks comprise outer ball tracks whose center lines are positioned in planes (E1, E2) which extend substantially parallel relative to one another, and inner ball tracks whose center lines are positioned in planes (E1', E2') which extend substantially parallel relative to one another" and where "track cross-sections of the outer ball tracks and the inner ball tracks of each pair of tracks are symmetrical relative to axes of symmetry (ES<sub>1</sub>, ES<sub>2</sub>) which, together with the outer and inner ball track planes (E1, E2, E1', E2'), form identically sized angles ( $f_1, f_2$ ) opening in opposite directions, and each comprise a common point (M, M')," which are similar to the recitations in claim 1.

As with independent claim 1, Ouchi does not teach numerous, if any, of the recitations of claim 34. As argued above with respect to claim 1, Ouchi does not teach or suggest the recitations of "wherein each two adjoining pairs of tracks comprise outer ball tracks whose center lines are positioned in planes (E1, E2) which extend substantially parallel relative to one another, and inner ball tracks whose center lines are positioned in planes (E1', E2') which extend substantially parallel



relative to one another” and where “track cross-sections of the outer ball tracks and the inner ball tracks of each pair of tracks are symmetrical relative to axes of symmetry ( $ES_1$ ,  $ES_2$ ) which, together with the outer and inner ball track planes ( $E1$ ,  $E2$ ,  $E1'$ ,  $E2'$ ), form identically sized angles ( $f_1$ ,  $f_2$ ) opening in opposite directions, and each comprise a common point ( $M$ ,  $M'$ ).” Accordingly, Ouchi cannot teach or suggest any of the recitations of claim 34. For at least the foregoing reasons, claims 34-35 should be allowed.

### CONCLUSION

In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicant's representative at the telephone number listed below.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. 66967-0024 from which the undersigned is authorized to draw. To the extent necessary, a petition for extension of time under 37 C.F.R. §1.136 is hereby made, the fee for which should also be charged to this Deposit Account.

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Respectfully submitted,

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